

# DURA 500

## Thermoplastic Elastomer (TPE) Roof Coating for Solar Installations



### Complete Surface Restoration System For Tar & Gravel, BUR, TPO, EPDM, Modified Bitumen

Dura 500 is a liquid applied, thermoplastic elastomer (TPE), roof membrane that provides permanent restoration for built-up roofing, rolled asphalt, TPO, EPDM, modified bitumen, torch down, and other flat roofing surfaces, without the need for primers. The product is a single part coating, based on new thermoplastic, block copolymer technology. DURA 500 has a high tensile strength of 1908 psi. And an elongation of 792%, insuring maximum durability in flat roof applications.

### The Effect of Heat Build-Up on Solar Panel Efficiency

A black asphalt, modified bitumen or rubber roof membrane absorbs heat on sunny days, reaching temperatures as high as 180 degrees Fahrenheit or 83 degrees Celsius. This heat raises the temperature of solar panels mounted anywhere near them.

One of the key factors impacting the amount of electricity your solar panels produce is the temperature at which they operate. It is easy to presume that more sun and therefore more heat result in more electricity, but this is wrong. Different solar panels react differently to the operating ambient temperature, but in all cases, the efficiency of a solar panel decreases when the panel core increases in temperature.

The 90% reflectivity of Dura 500 prevents the roof surface from absorbing solar heat, eliminating the “heat island” effect. An additional advantage is that extra reflected sunlight from the coating can contribute to increased solar panel performance, depending on mounting configuration.



### Controlling Heat Build-Up with Dura 500 Thermoplastic Flat Roof Coating

Flat asphalt roofs and those covered with black rubber membranes or modified bitumen can reach temperatures of up to 180 degrees Fahrenheit in direct sunlight, and absorb up to 70 percent of the resulting solar heat. Depending on insulation quality, a large portion of this heat can be transferred into the building.

By contrast, spray applied Dura 500 Thermoplastic Flat Roof Coating will reflect up to 90% of solar heat, and can reduce surface temperatures on a roof by as much as 80 degrees. This in turn, will cut temperatures in the building, increase the effectiveness of insulation, and cut cooling energy costs by 25% to 70%. It also makes the building more comfortable in areas that may not be air conditioned. The roof will last much longer with the elimination of heat-related blistering, cracking and deterioration.

### Long Term, Maintenance-Free Protection

After spending considerable cost and effort installing a solar panel system, the last thing you need is roof repair and maintenance issues. Properly installed Dura 500 Thermoplastic Flat Roof Coating will provide continuous leak and maintenance free protection for twenty years or more without the need for re-coating. The product is more durable than most rubber membranes and will withstand foot traffic, pressure washing, hail impact, ice build up, and ponding water. In the event of mechanical damage, Dura 500 is easily repairable as it instantly adheres to itself. The product has a low dirt pick-up feature allowing it to be flushed clean with each rainfall.



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